

Space Production and Spanish Imperial Geopolitics

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Introduction

When speaking of maps it is perfectly reasonable to distinguish between territory and space, because it is necessary to establish some difference between different ways of experiencing, remembering or thinking of places. Space, then, is a human production and therefore has historical and cultural connotations. Hence the importance of maps, specially those which seek to be validated before a court and/or in the corridors of power. A map is a document and also a monument, which means that to its value as a record we have to add a diplomatic function. Perhaps those who think that maps serve to show us the way to places are right: we, however, unashamedly disagree with this so-called practical utilitarianism. In any event, this article will ignore that commonplace of Whig historiography which seeks to see maps as a sort of driving force of movement or, in other words, to explain the progress of voyages or explorations by (or for) the existence of such representations of the seas or territories. We are backing a different strategy: to emphasize that maps are a highly original and efficient form of managing time. Thus, paradoxically, geographers would be experts at translating spaces into time: how long a journey might take (roads), the traces of administrators (estates or towns), the memory of conflicts (borders), the existence of sponsors (the names of things) or the signs of progress (ports or mines).

The production of maps is not as uniform as we might think, and differing practices record the different ways of understanding what a country was and, mainly,

what it aspired to be. Rather than showing what a territory is like, they show what the space that they create may become. The certainties, lies and folds that they contain and the corresponding management of time attain geopolitical rank or, in other words, serve a double purpose: on one hand they fix dividing lines and on the other they benefit their owner. For that reason in the eighteenth century the new technologies applied to space production (scientific expeditions, geodesic cartography, the algebra of populations and resources and the engineering of borders and forts) put maps in a delicate situation.

Livingstone has already pointed out the profound geographical transformation imposed by physicotheology¹, and one only has to read the introduction to *El Orinoco ilustrado* (1741) of the Jesuit José Gumilla to understand how much transition (spiritual) and management (material) there is in geographical description and in a map. But we are referring to a kind of representations which are conceived as topographic repositories ordered within both the territorial and jurisdictional fields, and whose intention was to generate bonds of proximity and property, and thence of authority to participate in decision-making forums². There are two things that happen to this type of representation in the middle of the eighteenth century. In the European context, the geographic paradigm promoted by Jean-Baptiste Bourguignon d'Anville manages, on the one hand, to perfect the protocols of documentary criticism, especially concerning the location of enclaves and, on the other, to emphasize the importance of purging 'formal' or 'modern' maps of descriptive information³. Together with this effort to replace the rhetoric of description by that of formalization, there are also the requirements of imperial logic and, in particular, the desire to form a homogenous image of the totality of their American possessions⁴.

Thus, when in the eighteenth century it was decided to make a modern map of Southern America, there surfaced all the tensions associated with the task of creating a historical account from the remarkable diversity of sources available. The undertaking was all the more problematic because it came at a moment when there was an urgent

need to transform maps into stable documents, without such a situation hindering operations aimed at the production of new spaces.

Attempting the Big Picture

In 1775 Minister of State Grimaldi received the results of the work that had been ordered ten years before from the geographer Juan de la Cruz Cano y Olmedilla (1734-1790): the engraving of a modern detailed map of Southern America. This map gave a uniform representation of a large part of everything that was known about an area of increasing political tension, historically mythical, rich in natural resources and unexplored in many of its regions. Cruz Cano, trained in Paris in the studio of D'Anville, had to copy and oversee the engraving of plates of the map drawn by Francisco Millau y Maravall (1728-1805), a sailor who had taken part in the expeditions emanating from the Treaty of Limits (1750) on the boundaries between the American territories of the Spanish and Portuguese empires. It was an easy task, but in 1766 Cruz Cano took the decision not to copy it and to create a new map based on all those available⁵.

Taking data coming from an extraordinary variety of sources he produced a rough draft of great dimensions that could only be managed laid flat on the ground, and on which he verified longitudes “with respect to all the nations which have established their meridians”⁶. This work would bear fruitful results. In 1769, for example, appeared the Spanish edition of the *Viage del comandante Byron al rededor del mundo*, translated and annotated by Casimiro Gómez Ortega (1740-1818), provided with a map by Cruz of the Magellan Strait, which consisted of a dialogue over two centuries between explorers, administrators and sailors, with sources ranging from the accounts of Pedro Sarmiento de Gamboa (1555-1620), to the latest map of Milhau (1768). Such a dialogue was possible because Cruz worked with four systems of reference for longitude, which included, as well as the Pico de Tenerife - still the most used- and the older one of Isla de Hierro, those of Paris and London, which were by then becoming

dominant. A simple glance at the map shows the importance of the toponymic differences and the war of names maintained with the English. The result is a toponymic and topographic encyclopedia, a sort of museum which allowed the hoarding of geographical space, and created a guide to the management of immense flows of colonial information.

If we compare this map of the Strait of Magellan of 1769 with that of 1775 we immediately notice that the information it contains is as important as that which is eliminated. In the second, the longitudes refer in the first instance to the east of Teide, although the other references remain and, of course, the toponymy is unified to Spanish or, as the author explains, the old names are recovered. Also coastal measurements and defeats (naval information) disappear, announcing what was already known but was not yet visible: that the coasts were going to be managed independently from the continental masses. As well as recovering the original names (which made it easier to compare old documents) the internal political borders are introduced - a decisive information to learn "where the Royal Taxes are collected, where there are Viceroyalties, where there is government and where there is a Corregidor (*local magistrate*)⁷-, as well as the highways and postal stations. Three objects (jurisdictions, communications and staging posts) that "... are not to be found in any geographer, and have only now been possible to obtain by dint of much time and good original information"⁸. Indeed, he had made a tremendous effort to flesh out the American skeleton with abundant colonial meat which, as a whole, included different forms of authority, represented political and cultural relations, defined areas of influence and recuperated documentary sources. Nevertheless, the map would soon become a source of argument, and not only for its errors or the persistence of some geographical myths⁹.

Even before it left the presses, it already had its enemies. When Admiral of the Fleet Manuel Antonio de Flores appeared in 1769 in Juan Cruz's house with his fellow naval officer Fernando Senrra to supervise the development of the map, "they

regretted that it was not a flat projection, [a map in] which only the coasts were included "¹⁰. It is not that the sailors hated the bureaucracy, nor that they distrusted these landbound geographers. They rejected the disproportionate character of that style of producing documents, based on technologies that were neither mathematical nor mechanical, and whose usefulness they found hard to discern. They had been trained to produce and to read another type of maps, other forms of representing and codifying information. And their way of incorporating geographical information into the political universe was also different.

Cruz's attempt, rather than representing space, unites and accumulates it depending on its appearance in time or, better, history. Its purpose was not to show distances, but to fix the univocality of the colonial world, unifying visual codes so that the map could defend metropolitan sovereignty over a homogenous whole, with no instability nor differences. Cruz was not aware that local information could have strategic value and might produce certain political discrepancies. The Viceroy of Río de la Plata, D. Pedro de Ceballos (1715-1778) had the map before him while he recommended his successor to use the roads from San Juan and the Diamante River to muster troops and to improve or raise the fortifications in Pergamino and Esquina de la Cruz Alta, Melinque and Punta del Sauce¹¹. But if we project onto Cruz's plan the troop movements and forts with which Ceballos intended to stabilize the province of Córdoba and stimulate its colonization from the coast, (fig 1), and compare it with the plan of 1794 (fig 2) of the road between Valparaíso and Buenos Aires drawn up by Felipe Bauzá (1764-1834) and José Espinosa y Tello (1763-1815), we can see that Cruz's map was describing the relationship of the people to their surroundings (biopolitics) and not relationships of force on the borders (geopolitics).

In the map of the sailors, trained as hydrographers in the School of Higher Studies of the Astronomical observatory of Cadiz, administrative borders, areas dominated by different indigenous nations and information on resources (the carob plantations of the Pampas, for example) all disappeared. There remained the rivers,

with their courses properly corrected, a denser and more carefully-selected network of roads and, above all, broad spaces labeled "unknown land". The information was suppressed in order better to calibrate the territory and to suggest the direction in which new spaces could be created. Thus, the blanks were functional because they avoided improvisations or the design of unreliable strategies. The unknown territory, as long as it did not change its status, counted only as a possibility and never as a political object. Hence in that interface of territory that we call a map, the silences served to represent areas without history or, in other words, places whose resources could not be mobilized and from which, as a consequence, no advantage could be obtained.

The fact is that the versatility of the Cruz map as a strategic tool depended on what, at the end of century, was already a great defect. The military engineer Francisco Requena, admirer of the Aragonese Cruz, put his finger on it: "he should print", he wrote in his report in 1802, "with lighter and less strong strokes everything that is put in the center of America purely for [geographical] reference, and not well examined nor organized by celestial observations, in order to differentiate, as all Geographers do, what is well-known from what is doubtful"¹². Requena seems to be suggesting that the manufacture of maps should take more care not to give equal weight to all the sources or methods of gathering information. The less certain the information, the weaker would be the outline, showing the degree of reliability of the sources, formulating the information "by layers", in such a way that each layer responded to different levels of requirements and that the disappearance of one did not affect the whole. The map of Cruz Cano, on the contrary, gave the same validity to all traditions (within the margins of rigor established by the historical criticism of the Enlightenment), and did not explain the values or interests by which the information could be prioritized. Consequently, it might be reasonably precise and practical, but by leaving open many possibilities, it gave rise to too much uncertainty: it neither stabilized an object (colonial space), nor eliminated a conflict (disputes with Portugal), nor did it set a trend; that is to say, it did not permit the identification of a line of progress in the management of the colonial

territory¹³.

Depicting lands as achievement: maps as monuments.

The division of America into kingdoms favoured ways of approaching territory that created affinities within administrative spaces, but also led to clashes with other Viceroyalties. Nevertheless, the general cartographic representation of these spaces was not carried out at the same time, which meant that such representations were not a collective answer to the needs of the court in Madrid. Let us consider, for example, New Granada, whose first modern small-scale general map arrived in 1790, after being commissioned by the Viceroy Jose Ezpeleta (1740-1823). At the beginning of the nineteenth century appeared the *Carta esférica que comprehende parte del Nuevo Reyno de Granada* (1804-1805) of the engineers Joaquin Fidalgo and Carlos Cabrer. In 1808, by order of the Viceroy Antonio Amat y Borbón, the lieutenant-colonel of engineers Don Vicente Talledo and Rivera finished his famous *Mapa corográfico del Nuevo Reyno de Granada*, drawn, as the title indicates, according to "the best astronomical observations, up to date news and trigonometrical operations".

In New Spain the demands for a general cartographic representation came earlier¹⁴. The first map of 1746 we owe to Jose Antonio Villaseñor y Sanchez (fl. 1733-1756). Two decades later, it would be Father José de Alzate y Ramirez (1737-1799) who drew the *Nuevo Mapa Geográfico de la América Septentrional Española, dividida en Obispados y Provincias* (1767). Alzate also created in 1772 his other great map of New Spain, the *Plano Geográfico de la mayor parte de la América Septentrional Española*, a correction of the previous one in order to "bring it into line with new astronomical observations". The same year, Joaquin Velázquez Cárdenas y León (1732-1786) would draw his *Mapa manuscrito de toda la Nueva España* (1772). In 1779, Miguel Constanzó (fl. 1764-1790) compiled by order of the Viceroy Bucareli (1717-1779) the map of the Internal Provinces and, some years later, Antonio Forcada

drew up the *Mapa manuscrito de todo el reino de Nueva España, desde los 16° a los 40° de latitud* (1787)¹⁵. And, finally, in 1794 we already have that prepared by Carlos de Urrutia (1750-1825), *Plano Geográfico de la mayor parte del Virreynato de Nueva España* (1793), included in the *Noticia Geográfica del Reyno de Nueva España* (1794), a text of statistical and demographic character that the Viceroy and second Count of Revilla Gigedo (1740-1799) had asked him for¹⁶.

In fact, as we see, the administrative reforms of the colonies undertaken by the Bourbons implied a remarkable increase in cartographic activity. When in 1741 topographic accounts were made of the 129 jurisdictions which New Spain encompassed, only 5 included maps in their replies¹⁷, a deficiency that Alzate attributed to the instability of the mayors, for "since it is so laid down by law, a mayor resides in the same territory just a short time and, therefore, he cannot have that topographic instruction which the priests have "¹⁸. And the fact is that, indeed, the interest of the different religious orders in ethnographic, linguistic or anthropological studies, as well as economic reasons, had given them a considerable advantage in designing and establishing a network of schools, hospitals and other social instruments, such as churches or craftsmen's workshops. No wonder then that the priests, as Alzate calls them, together with the Creoles, tended to see space as an object of great plasticity, subject to commercial, meteorological or sanitary vicissitudes and which, therefore, had frequently to be reviewed. The 1767 map drawn by Alzate mentioned above is a classic example. Its decorative border is made up of small boxes showing the country as a cornucopia of vegetable and animal life, inhabited by people occupied in a diversity of work¹⁹. The territory is always seen in relation to these two poles: resources and people. When the map is unfolded, what its small symbols show is always the relation between both, their absence or presence.

But this border would be omitted in the second version of the map, producing another type of cartographic blank, one that silenced the moral history, which had been so successfully developed by Jesuit or Franciscan literature (fig 3). The cancellation of

those resources of epic rhetoric highlighted the renewed importance of the enclaves, and hence the dialogue with other New Spanish geographers, especially with Costanzó, Luis Surville²⁰ and the anonymous author of the map of the province of Sonora of 1770. So, for example, Alzate would record forts (for example, "Our Lady of the Pilar, is the prison of the Adaes, created in 1717"), mines and indigenous establishments. For his part Costanzó would also record forts (existing or reformed) and detachments, in addition to urban nuclei, including missions, estates, royal mines, indigenous settlements, staging posts and stopping places, also including abandoned sites and derelict mines, signs which tell us not what there is, but what there was; in other words, that show us a territory under construction²¹.

In the case of the Internal Provinces, whose three most important provinces (New Biscay, New Mexico and Sonora) totalled 226,600 inhabitants, mostly dedicated to trading and mining²², they were the object of mapmaking which, in our opinion, is of particular interest to verify how, in the midst of extraordinary tensions between the indigenous populations and the metropolis, maps contributed to the redefinition of strategies of territorial management. They were required in order to sanction or correct measures affecting the consolidation of new spaces²³. And their influence was particularly clear in the policies of the line of forts. Captain of Engineers Nicholas de Lafora, who with the regimental draughtsman Second Lieutenant Jose Urrutia would accompany the Marquis de Rubí in his commission to visit the forts on the northern frontier of the viceroyalty and to propose the reforms that he considered advisable²⁴, would entitle his report "Report of Captain of Engineers Don Nicolás de Lafora concerning the securing of the borders of New Biscay. Based on what he has seen of them, the reports of the most practical people and on the most correct maps of this country" (1766). And later he prepared the "Mapa de la frontera de Nueva España" (1771), in which he showed how forts should be redistributed: the plan and report would become the essential reference for the decision of reform²⁵. The symbol of depopulation might mean the exhaustion of a resource or the victory of the insurgent

Indians²⁶. But at the same time, the discovery of new deposits or the foundation of other colonies confirmed the prospects of continuity in the fight against the trend towards depopulation, for Governor Riperdá himself foresaw that the province of Texas "will only have its name left"²⁷. The maps were still descriptive, but they also sought to be prescriptive. And this in spite of the fact that their references could be extremely unstable and fragile. If settlements, particularly of miners, could be very short-lived²⁸, the line of forts would have to face the threat of becoming isolated from each other²⁹.

The construction of the territory as achievement, as the gradual conquest of stability, not only established local actors as important political agents as in the case of the earliest chorographic production³⁰, but basically, unlike the latter, redeveloped the concept of territory as a fundamentally technological and economic enterprise towards which all social and natural actors are drawn. This participation took different forms, from consultation³¹, to individual or collective economic contribution³² or the creation of establishments and infrastructures³³. The identity of places is not defined exclusively by their plants or animals, but by their mines and water supply³⁴. Maps were showing that only the proper use of suitable technologies could replace the immense emptinesses depicted in the abandoned provinces with prospects of new colonies.

The empire as a strategy of access: facing deterritorialization

The multifarious corrections that the Cruz Cano map underwent, beginning with the erasure of the demarcation line of the Spanish-Portuguese border, form part of the obsession of the metropolitan authorities with having fixed, almost immutable, cartography. This does not mean that it was unnecessary to make modifications to them, only that whatever went into them could no longer be moved. For this reason, time and caution are required when filling in a map. Thus, in Bauzá's map of Patagonia (1798) (fig 4)³⁵ the interruptions of the coastline were evidence of a lack of certain knowledge and, in the same way, all the information about the area considered

doubtful or inadmissible also disappears, e.g. the communication routes that Cruz Cano drew in Tierra del Fuego. We have before us, then, a map very different from those mentioned before. In contrast to the profound historicism and overload of data on the “intendencia” or regional maps, naval hydrographers created a style of mapmaking, following guidelines from the metropolis, which aimed for a radical level of stability. This stability was, of course, restricted almost exclusively to the principal aim of these maps, the outline of the coast.

We are talking here about a drift which affected all imperial powers in the same way, and which needs to be explained. There is nothing obvious about a process that had turned the memory of places, all that information compiled by Cruz Cano from the most varied documentary sources, into irrelevant information: extraneous curiosities, trivialities for scholars. Harley interprets this displacement, prompted by a scientific theory, as a landmark in the process of dehumanization of the landscape, concealed beneath the inability of hydrographic engineers to include the descriptions of peculiar and local features³⁶. We respect this approach, but we are sure that there is something more to be said about the proliferation of empty space, the desire for silence imposed by imperial management. Indeed, at the end of the eighteenth century Spanish cartographic production was extraordinarily developed, at the same time as means were created to reunite dispersed historical material referring principally to the colonies³⁷. Not all came into public view, but many were published or copied and interchanged at the request of other European countries. Suddenly maps acquired an enormous diplomatic value.

What was at stake were the limits of empire, and maps were no longer exclusively scientific, becoming documents in an international dialogue of markedly legal character. The very idea of an imperial limit is still strange. The old empires’ strategies for structuring territory show to what extent the construction of imperial limits, in contrast with its empty spaces, has not been a constant³⁸. The preoccupation with accurately drawing the coastal perimeter was the consequence of a deep conceptual

transformation of ocean space that had been developing since the end of the seventeenth century. If the increase in marine traffic raised the problem of whether ocean space should be of a public nature, a common³⁹; the political and legal analysis of the insular condition opened by Great Britain encouraged new geostrategic balances⁴⁰. The proposal to establish contact with the enemy on the basis of regional economic criteria and not the balance of European powers lent political robustness to the trading enclaves, even giving preference to the islands, subject to limits of supply (Gillis, 2003). And Great Britain had sufficient military arguments to guarantee commercial privileges for its colonies.

What comes later is easy to explain because the development of naval technology reduced distances and increased contacts between the different colonies and with the metropolis. Space was contracted, deterritorialized, and in few years European colonial policies changed dramatically. The main strategic option was no longer the search for a point in the coast from which to reach interior⁴¹. Now the goal was on the coast itself, the main area of claims for jurisdictional rights, even when there were no claims of ownership⁴². But the spectacular development of trade gave constant cause for tension which, by opening bitter disputes on the legitimacy of certain commercial privileges, ended in the revision of criteria for the acceptance of claims of territorial possession.

At the end of the century, the Nootka crisis brought Spain and Great Britain to the brink of war⁴³ making it clear that the intricate jurisdictional network that maintained such a fragile equilibrium was sustainable only so long as the principle of property was not put into question. Great Britain, who until then had been guided by the classic criterion of discovery and symbolic possession, upheld occupation as a basic principle to justify these rights⁴⁴. The signature of the El Escorial agreement (1792), that would end such tensions, as well as the difficulties of the later commission of limits to make the treaty effective, would show that the battle for the islands dealt a death blow to traditional colonial balances. A large part of the Spanish possessions in America had

not been ratified in any treaty, and in Spain there was suspicion of the danger that the English would "populate and fortify the immense coasts and islands of our America from the River Plate, going round Cape Horn to Valdivia and Chiloé; nor are there sufficient forces nor strength to prevent it nor yet any means of knowing the places where they are until it is too late to cast them out"⁴⁵. It is no wonder then that José Francisco Bodega y Quadra (1743-1794), to avoid the threat of disintegration posed by the English demand for the return of their possessions at Nootka, insisted that George Vancouver (1757-1798) recognize that occupation did not imply property⁴⁶, a tailor-made formula to counter the new British arguments for defining unconquered lands. In any case, the Spanish crown had to recognize that it needed to reformulate its policy of production of coastal space.

The treaty contemplated a moratorium on the creation of new settlements on the islands and coasts of southern America, but, according to a secret article, the pact would only be valid as long as no power settled in that area⁴⁷. This situation forced the Spanish crown to keep constant watch, which made the possession of the coast and adjacent islands in some way a geostrategic disadvantage. Bodega y Quadra must have trembled at the possibility that a large part of what had been taken for a continental mass might turn out to be an archipelago⁴⁸: hence his hurry, and that of Vancouver, each for opposite reasons, to examine the coast "at whatever risk" "from 47 degrees southwards with such precision that not one river or bay be overlooked as far as 41 degrees"⁴⁹. This is also the reasoning behind the decision to leave settlements like San Blas, with a terrible climate and insufficient depth for large frigates, or to occupy enclaves strategic for trade, like Nootka, and to make the already existing ones to the north of California profitable. All these suggestions were directed towards the construction of a coastline independent from the territories of the interior. A line which, after being recognized and being translated into an international language (that is to say, mathematical), would permit the localization of a handful of enclaves suitable for marine trade. This strategy had the advantage that it assumed the commodification of

the coastal strip, favoured by the new navigational facilities, but it would restrict occupation to the objectively occupiable enclaves. In addition, the coasts were marked as the limits of new space. In other words, their "inland", the densely-filled area on the map in relation with which the coastal strip established references and, so to speak, communicates, was located in the oceanic space.

Although the question of property, jurisdiction and sovereignty would be a lasting problem, maps achieved diplomatic status because, as they accumulated the different defeats on the same plan, new discoveries and successive reconnaissance were introduced directly and fully into international legislation⁵⁰. At the same time, the territorial vacuum of the inland space turned the coasts into a legal watershed. And as it did so, the hydrographic charts identified as the only valid interlocutors in the international panorama their indirect author, the Spanish Crown, and those powers in a position to construct a territory on the ocean.

The enclaves, in short, gained value insofar as they came to form part of transoceanic trade, which meant that the policies of space production had to be projected onto the surface of the seas. In practice the oceans then ceased to belong to the public domain, and those "silences" that the hydrographers had depicted inlands of the continental masses were offset by these claims offshore. Thus, the "deterritorialization" implied by the purge of the Cruz map ran parallel to this "reterritorialization" of the Empire of the seas, which the hydrographers depicted in order to be able to take part in the new struggles of geopolitics.

Conclusion

The erudite commander Alexander Malaspina once defined the British empire as an amphibious body with a trading head and military body ⁵¹. It is also possible to invent an ad hoc chimera for the Spanish empire, another monster whose body was half inland and half a shoreline empire. Cartography, indeed, echoed this duality,

because what was valid at the level of biopolitics (the cross between geographic features and the tracks of human activity), was inadmissible on the scale of geopolitics (the cross between two types of document, scientific and diplomatic)..

However, strategic considerations are not sufficient to justify the differences between the internal and external representations of the dominions of the empire. We also need to consider other arguments of an epistemic nature. The internal argument emphasized the location of resources and populations, and it was restricted to showing the existence of certain territorial bonds that, besides creating a hierarchy of places, also worked as lines of force that hinted at future mobilizations. The territory at that time was constructed like an organization in a permanent process of growth, which implied the rejection of earlier cartographic traditions. On the other hand, the oceanic representation of the empire rejected any idea of change, whatever the situation in the continental interiors, trying to turn the coasts into an ontologically stable object which would in consequence be manageable by a lasting international treaty.

Within this context the failure of Cruz Cano's map indicated the end of a world whose actors had lost political relevance, and which, together with the archaeological, anthropological or ethnographic knowledge to which they were intimately bound, had to migrate from the world of wonders and curiosities to that of treasures and thesauruses. And just as maps became technical documents, objects too underwent a process of thesaurisation (according to the new conventions produced by the scientists) before being put away into the reduced space of the museums⁵². So, as their display cabinets filled, the maps emptied. Cartographic voids, nevertheless, behaved differently according to whether they referred to the inland or the shoreland empire. The "silences" that came from the interior preached the end of exceptionality and the beginning of the fact that the whole territory could be treated with the same yardstick: that is, by means of biopolitical tools (demographic tables, balances of payments, inventories of resources, medical geographies, botanical classifications) and management projects consistent with territorial evolution. On the contrary, their use in coastal maps

contributed to the illusion that the hydrographic solution was universal and, consequently, being free of political connotations, could be the basis for a global solution to geopolitical conflicts. Using the voids in such a different way, the Spanish crown disconnected two worlds, which allowed it to be an important actor on two stages at once, competing with the British in the maritime theater without, on the other hand, jeopardizing its own colonial policies.

- ¹ David N. Livingstone, *The Geographical Tradition. Episodes in the History of a Contested Enterprise* (Oxford UK/Cambridge USA: Blackwell, 1992): 108ss
- ² Richard Helgerson, "The Land Speaks: Cartography, Chorography, and Subversion in Renaissance England," *Representations*, 16 (1986): 50-85
- ³ Godlewska, 1989; 1999
- ⁴ Although the empire developed instruments for the monitoring of the geographic evolution of cities from the time of Felipe II, this information would generally be linked to the economic (and historical) management of the territory, and it would not receive an overall graphical form, partly because many of the maps sent by the colonies came from the natives and were, therefore, useless for the purpose of obtaining a consistent overall image. In the case of New Spain, 65% of the maps were commissioned from natives, because "images were the province of the "indios". See Barbara E. Mundy, *The Mapping of New Spain. Indigenous Cartography and the Maps of the Relaciones Geográficas* (Chicago/London: University of Chicago Press, 1996), 30.
- ⁵ Letter from Cruz Cano to the Marqués de Grimaldi (31 March 1770), in Ricardo Donoso, "El mapa de la América Meridional de la Cruz Cano y Olmedilla," *Revista Chilena de Historia y Geografía* 131, (1963): 142. Letter from Cruz Cano [to Grimaldi] (8 December 1767) in *ibid.* 141, 136. Thomas R. Smith, "Cruz Cano's Map of South America, Madrid, 1775: its creation, adversities and rehabilitation," *Imago Mundi* XX, (1966): 55, 57.
- ⁶ Donoso, "El Mapa de América Meridional", 143
- ⁷ Letter from Hipólito Ricarte to Francisco Manuel Mena (8 December 1775) in *Ibid.*, 154
- ⁸ *Ibid.*, 155
- ⁹ On the geographical myths included in the map, see Ken Mitchell, "Science, Giants and Gold: Juan de la Cruz Cano y Olmedilla's Mapa Geografico de la América Meridional," *Terra Incognita* 31, (1999): 25-41
- ¹⁰ Donoso, "El Mapa de América Meridional", 144.
- ¹¹ orders from Ceballos to Vertiz (12 June 1778), in Donoso, "El Mapa de América Meridional", 123-126
- ¹² Report of Francisco Requena on Cruz's Map (9 December 1802) in *Ibid.*, 167
- ¹³ The demand for less ethnographic information does not imply the alleged lack of interest on the part of the metropolis in native or local cultures. For centuries, but significantly throughout the

eighteenth, data would be requested in geographical accounts on the physical, cultural and economic environment of the colonies. Gerhard compares the evolution of the contents of the accounts from 1523 to 1825 and shows the loss of interest in pre-Hispanic culture as of 1648-50, but a more constant monitoring of economic and cultural evolution and that of infrastructures from then onwards. See Paul Gerhard, *Geografía histórica de Nueva España 1519-1821* (México: UNAM, 1986), 30.

- ¹⁴ What follows is based fundamentally on Michel Antochiw, “La visión total de la Nueva España. Los mapas generales del siglo XVIII,” in Héctor Mendoza Vargas, ed., *México a través de los mapas* (México: UNAM-PyV, 2000) and Elias Trabulse, “La cartografía en la historia de la ciencia en México”, in *Cartografía Mexicana Tesoros de la Nación. Siglos XVI a XIX* (México: Archivo General de la Nación, 1983)
- ¹⁵ Antochiw, “La visión total de la Nueva España”, 81
- ¹⁶ Trabulse, “La cartografía”, 26
- ¹⁷ Gerhard, *Geografía histórica*, 33
- ¹⁸ Trabulse, “La cartografía...”, 25
- ¹⁹ Alzate’s map is no exception. From the same period comes, for example, the *Mapa Corográfico de la provincia que propiamente se llama Sonora [...] situada en la America Septentrional* (1768) of Nicolás Medina y Cabrera, advocate in the Royal Court of Mexico, with a border depicting agricultural and stockbreeding achievements. (152 x 151 cm, Museo Naval).
- ²⁰ *Tercera parte del Mapa que comprende la frontera de los dominios del Rey en la America Septentrional copiado por Dn. Luis de Surville según el original que hizo Dn Jph. De Urrutia sobre varios puntos observados por él y el capitán de Yngenieros D. Nicolas Lafora*, 1769 (Servicio Geográfico del Ejército)
- ²¹ This same type of information appears, for example, in Surville’s map, the anonymous Map of Sonora dedicated to D. José Tienda de Cuervo, governor of the provinces of Sinaloa, Sonora..., 1770 (Museo Naval), which also includes watering holes/aguajes and springs; the *Mapa Corografico de la Nueva Andalucia de D. Luis Surville*, produced at the orders of José Gálvez in 1778, and published in the *Historia Coro-grafica, natural y evangelica de la Nueva Andalucia* (Madrid, 1779) of Father Antonio Caulin.
- ²² Luis Navarro García, *José Gálvez y la Comandancia General de las Provincias Internas*.

(Sevilla: CSIC, 1964): 118

- ²³ The foundations of this idea had been laid by the Real Ordenanza de Intendentes (Royal Ordinance of Governors), particularly articles 57 and 58, which Revilla Gigedo, with insufficient men to carry out the work, solved by commissioning several officers in 1791 to “draw up plans of the places which they consider worthy of this operation, extending their reports and observations, in order to give some idea of their local situation and of the advantages they may yield or defects which should really be attended to” Revilla Gigedo to Carlos Urrutia, 30 October 1793, in Carlos Urrutia, “Noticia geográfica del Reino de Nueva España y estado de su población, agricultura, artes y comercio (1794)”, in E. Florescano e I. Gil, *Descripciones económicas generales de Nueva España 1784-1817* (México: SEP-INAH, 1973): 74)
- ²⁴ Navarro, *José Gálvez*, 135
- ²⁵ *Ibid.*, 216-217
- ²⁶ This was the case of the town and encampment of San Juan de Sonora, the first capital of the province, which disappeared due to the incursions of the Seris. *Ibid.*, 121.
- ²⁷ *Ibid.*, 187
- ²⁸ The encampment at Basis, for example, had 594 people in 1778, but in the following year was down to only 289 (*Ibid.*, 413).
- ²⁹ As was the case in Sonora about 1777, since they were obliged to perform other duties, such as assisting with supplies of provisions and mail in frontier towns (*Ibid.*, 387)
- ³⁰ See Richard Helgerson, “The Land Speaks: Cartography, Chorography, and Subversion in Renaissance England,” *Representations* 16 (1986): 50-85
- ³¹ For example, in the pacification of Nueva Vizcaya soldiers, business and mining representatives, and individuals were consulted about the relocation of the forts (Navarro, *José de Gálvez*, 109-110)
- ³² One of the more important collective contributions was without a doubt that of the Spanish trade delegation of Jalapa, the consulates and merchants of Mexico, Puebla and Veracruz, the ecclesiastical chapters of Durango and Oaxaca and some merchants and miners and neighbors of the missions and the border, who financed most of the campaign of Gálvez (*Ibid.*, 149-150). The authorities were confident of the economic commitment to stabilize the territories, and for that reason after the pacification of Sonora, Gálvez published a “Plan of a company of

Shareholders to foment the activity of benefit of the rich Sinaloa and Sonora mines, and to restore the Pearl Fisheries in the Gulf of California" (1771), although the project did not have the awaited endorsement (Ibid., 200, 253).

³³ This form of participation was particularly encouraged due to its political impact. For that reason colonel Domingo Elizondo in 1770 informed Bucareli that the Seris and Suaquis of Pitic had constructed a corral and an irrigation ditch to irrigate their crops, and had a dam under construction. Navarro considers this information as the veritable announcement of the pacification of the zone (Ibid., 205). Beneath these ideas of collective responsibility in the construction of the territory lies the internalization of biopolitics, the notion that "The more citizens there are in a Kingdom, the more the taxpayers and the greater the number of hands available for all the enterprises and resources to increase the general wealth " (Carlos Urrutia, "Noticia geográfica del Reino de Nueva España y estado de su población, agricultura, artes y comercio (1794)", in E. Florescano e I. Gil, *Descripciones económicas generales de Nueva España 1784-1817* (México: SEP-INAH, 1973): 101)

³⁴ The discovery in 1770 of the extraordinarily productive la Cieneguilla mine in Sonora, for example, had to confront the problem of water shortage in the area (Navarro, *José Gálvez*, 205-206)

³⁵ *Carta esférica de las costas de la América Meridional desde el paralelo de 36° 30' de latitud S. hasta Cabo de Hornos levantada de orden del Rey en 1789, 90, 94 y 95 por varios Oficiales de la Marina*, 1798. Reproduced in Julio Guillén Tato, *Monumenta Chartographica Indiana* (Madrid: Ministerio de Asuntos Exteriores, 1942, mapa 95

³⁶ Brian Harley, "Silences and Secrecy. The Hidden Agenda of Cartography in Early Modern Europe" in Brian Harley, *The new nature of maps. Essays in the History of Cartography*, ed. Paul Laxon. (Baltimore/London: The Johns Hopkins University Press, 2001), 98

³⁷ The Dirección Hidrográfica (Hydrographic Office) set up in 1797 to ensure the accurate publication of Spanish hydrographic mapmaking, possessed in 1808 a collection of 80,000 charts, plans and pictures. Ursula Lamb, "Martín Fernández de Navarrete clears the deck: The Spanish Hydrographic Office, (1809-24)," *Centro de Estudos de História e Cartografia Antiga, Série Separatas 81*(Coimbra: Junta de Investigações Científicas do Ultramar, 1980): 31

³⁸ Monica L. Smith, "Networks, Territories, and the Cartography of Ancient States," *Annals of the*

- ³⁹ Philip E. Steinberg, "Lines of Division, Lines of Connection: Stewardship in the the World Ocean," *Geographical Review* 89:2, (1999): 254-264
- ⁴⁰ On the vicissitudes of the British about face in matters of foreign policy and its influence on American expansion, see Felix Gilbert's classic article, "The English Background of American Isolationism in the Eighteenth Century," *William and Mary Quarterly* 1 (1944): 138-160, in Arthur Power Dudden, ed., *American Empire in the Pacific. From Trade to Strategic Balance, 1700-1922*, The Pacific World (Aldershot: Ashgate Variorum, 2004)
- ⁴¹ Juan Pimentel has analyzed how this change affected the perception of overseas territory and the strategies of exploration in the cases of Quirós –for whom the discovery of a coast was sufficient grounds to claim a continent- and of Cook, where in spite of surveying 3000 km of coastline, there was still a great void. Juan Pimentel, *Testigos del mundo. Ciencia, literatura y viajes en la Ilustración*. (Madrid: Marcial Pons, 2003), 71-109.
- ⁴² Lauren Benton, "Oceans of Law: The Legal Geography of the Seventeenth-Century Seas." Paper presented at Seascapes, Littoral Cultures, and Trans-Oceanic Exchanges, Library of Congress, Washington D.C., February 12-15, 2003.
<<http://www.historycooperative.org/proceedings/seascapes/benton.html>> (16 Dec. 2005).
- ⁴³ A good summary of the events surrounding this crisis is in Salvador Bernabeu Albert, "El tratado de Tordesillas y su Repercusión en el Tratado de Límites de 1792," in Juan Francisco Bodega y Quadra, *Nutka 1792. Viaje a la costa Noroeste de la América Septentrional por Don Juan Francisco de la Bodega y Quadra, Capitán de Navío*, edited by Mercedes Palau, Freeman Tovell, Pamela Sprätz and Robert Inglis, 47-59. (Madrid: Ministerio de Asuntos Exteriores, 1998). On the complex diplomatic negotiations over the crisi, see Howard V. Evans, "The Nootka Sound Controversy in Anglo-French Diplomacy, 1790," *The Journal of Modern History* 46:4 (1974): 609-640
- ⁴⁴ Only in 1580 had Britain expressed her doubts about the Spanish King's sovereign rights over the Indias, based on the principle of occupation, see James Simsarian, "The Acquisition of Legal Title to Terra Nullius," *Political Science Quarterly* 53:1 (1938):113
- ⁴⁵ "Reflexiones sobre la convención hecha con Inglaterra en 28 de octubre de 1790" (Mss. AHN, Estado, leg. 4291) quoted in Salvador Bernabeu, "El Tratado de Tordesillas...", 58.

- ⁴⁶ Juan Francisco Bodega y Quadra to George Vancouver, September 13th 1792, in Bodega y Quadra, *Nutka 1792*, 162.
- ⁴⁷ "Tratado del Escorial", in Juan Francisco Bodega y Quadra, *El descubrimiento del fin del mundo (1775-1792)*, ed. Salvador Bernabeu (Madrid: Alianza Editorial, 1990), 259
- ⁴⁸ Bodega y Quadra, *Nutka 1792*, 173
- ⁴⁹ Ibid., 146
- ⁵⁰ Even those which refused to get into open argument on these matters, as did the *Carta general de cuanto hasta hoy se ha descubierto y examinado por los españoles en la costa Septentrional de California* (1791) of Bodega y Quadra, whose paper showed the dates of discovery of and visits to the different enclaves.
- ⁵¹ Alejandro Malaspina, "Examen político de las colonias inglesas en el mar Pacífico" [1793], in Juan Pimentel, *En el panóptico del mar del sur. Orígenes y desarrollo de la visita Australiana de la expedición Malaspina (1793)* (Madrid: CSIC, 1992), 135
- ⁵² Antonio Lafuente and Nuria Valverde, "The emergence of Early Modern Commons: Technology, Heritage and Enlightenment", 2004 (unpublished).

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Illustrations

